

**REMARKS**

Entry of the foregoing, reexamination, and further and favorable reconsideration of the subject application in light of the following remarks, pursuant to and consistent with 37 C.F.R. § 1.116, are respectfully requested.

**I. Amendments to the Claims**

By the foregoing amendment, claims 25, 28-32, 34-36, 43, and 46-52 have been canceled, and new claims 53-80 have been added. The new claims have been added to more particularly recite the *araD* gene sequences. Support for the new claims can be found throughout the application as filed.

The amendments to the claims, including cancellation of claims, have been made without prejudice or disclaimer to any subject matter recited or canceled herein. Applicants reserve the right to file one or more continuation and/or divisional applications directed to any canceled subject matter. No new matter has been added, and entry of the foregoing amendments of the above-identified application are respectfully requested.

**II. Response to Claim Rejections Under 35 U.S.C. § 112, First Paragraph**

At pages 2-4 of the Office Action, claims 25, 28-32, 34-36, 43, and 46-48 have been rejected under 35 U.S.C. § 112, first paragraph, as purportedly failing to comply with the written description requirement.

In particular, the Examiner has stated that the specification does not sufficiently describe the broad class of nucleic acid sequences encoding active L-ribulose-5-phosphate 4-epimerases (*i.e.* *araD* genes and variants thereof) that are encompassed by the claims.

As noted above, the claims have been amended to more particularly recite the *araD* gene sequences. Specifically, the claims as amended recite *E. coli araD* genes comprising SEQ ID NOS: 1, 18, or 19, or variants wherein codon 8 of the *araD* gene has been mutated to encode a stop codon rather than a glutamine. Applicants submit that the written description requirement is met for the entire scope of the claims. Accordingly, Applicants respectfully request reconsideration and withdrawal of this rejection.

### **III. Response to Claim Objections**

At page 5 of the Office Action, claims 49-52 have been objected to as being dependent upon a rejected base claim.

Claims 49-52 have been canceled, rendering the objections moot.

**CONCLUSION**

From the foregoing, further and favorable action in the form of a Notice of Allowance is believed to be next in order. Such action is earnestly solicited.

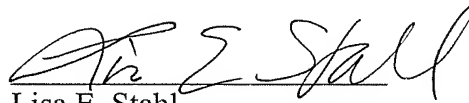
In the event that there are any questions relating to this Amendment and Reply, or the application in general, it would be appreciated if the Examiner would contact the undersigned attorney by telephone at (703) 838-6609 so that prosecution of the application may be expedited.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

Date: August 28, 2008

By:

A handwritten signature in black ink, appearing to read 'Lisa E. Stahl', written over a horizontal line.

Lisa E. Stahl

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